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RECEIVED

March 4, 1996

Dr. Peter Culver, P.E.
U.S. Environmental Protection Agency
Region VII, Superfund Branch
726 Minnesota Avenue
Kansas City, Kansas 66101

Sub. Mound Street PCB's
ID# MO0000093682
1.3
Sverdrup
3-4-96

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SUPERFUND DIVISION

Project: ARCS Region VI, VII, and VIII Contract No. 68-W9-0032
Subject: Field Sampling Plan (FSP) for the Mound Street PCB Site, St. Louis, Missouri
(CERCLIS ID No. MO0000093682)

Dear Dr. Culver:

Sverdrup Corporation (Sverdrup) is pleased to submit two copies of the attached Field Sampling Plan (FSP), Revision 1, for the Mound Street PCB Site located in St. Louis, Missouri. The FSP outlines the sampling and analyses proposed for the ongoing Screening Site Inspection (SSI) at the site.

If you have any questions concerning the FSP, please feel free to contact me at (913) 663-2108.

Sincerely,

SVERDRUP ENVIRONMENTAL, Inc.

Michael W. McCurdy, CHMM
Project Manager

cc: 10865-37/DC
File

30024043



Superfund

SVERDRUP RESPONSE TO COMMENTS

Re: Screening Site Inspection Site Assignment Sampling Plan
Mound Street PCB Site, St. Louis, Missouri

Reviewed by: Douglas J. Brune, Environmental Engineer, EDSB/ENSV, February 27, 1996

1. Signature approval page

Comment The Region 7 QA Manager is Ernest L. Arnold.

Response The signature page has been revised.

2. Previous Investigations, Section 2.3, page 2-8

Comment a) The first bullet identifies the conclusions of the March 21, 1994, PA as submitted by MDNR.

The conclusions of the PA report indicate that a threat

It is not clear the "threat" being referred, as well as how a release to the Mississippi River could happen.

It is not clear the reason for describing investigations at the site in reverse-chronological order.

Response The text has been revised to state "... a threat to release via ..." The groundwater to surface water release to the Mississippi River is being investigated. The descriptions of previous investigations have been revised to be in chronological order.

Comment b) The more routine units for PCBs-in-oil samples are mg/kg, as opposed to mg/L. See the discussion provided on page 2-10.

Response The data was presented as "ppm" in the E&E/FIT PA report. The text has been revised to indicate ppm at the units.

3. Table 4-1, page 4-2

Comment "Levels of concern" should be identified for the soil and groundwater samples in order to evaluate the adequacy of the "requested detection limits."

Response

The preliminary and potential media contaminant benchmark concentrations for soil have been included in the revised ASR form along with references to the benchmark concentrations. The requested detection limits for analysis of soil samples, in Table 4-1, do not require revision.

The preliminary and potential media contaminant benchmark concentrations for ground water have been included in the revised ASR form along with references to the benchmark concentrations. The text on page 4-5 has been revised to state that groundwater samples will be compared to MDNR surface water quality standards, with a 1 E5 dilution for the Mississippi River, per SI Table 12 (HRS Table 4-13) surface water dilution weights from the SI Scoresheets. Since the groundwater is not used for drinking water and the groundwater to surface water element is being investigated, surface water quality standards were selected for benchmark values. The requested detection limits for water analysis, in Table 4-1, do not require revision.

4. Sampling Activities Section 4.0, page 4-1

Comment

a) The authors state that oil samples collected on two separate occasions from the basement of the Mound Street PCB Site building showed no detectable PCB contamination; this appears to be the justification for not re-sampling. The authors should provide more details, i.e. the sample location, the entity that collected the sample and/or conducted the extraction/analysis, and levels of detection.

Response

The on-site soil borings will be conducted at the location of the former power plant building, which was demolished in 1991. The requested information on previous sampling is presented in the discussion of previous investigations under Section 2.3.

Comment

b) The authors define background in the second paragraph as “ambient concentration of a hazardous substance and includes [a] naturally occurring concentrations, [b] concentrations from man-made sources other than the site being evaluated, and [c] concentrations from the site.”

Is this the definition of choice? If so, it is not clear how contamination can be attributed to the site if the “background” sample is already contaminated.

Response

The definition of background was taken directly from Section 4.4, page 57, of the SI Guidance Manual. Sverdrup agrees that this verbiage is awkward. However, background conditions will undoubtedly include some

contaminant concentrations, but not at the levels expected for the site. The text on page 4-1 has been revised to include a reference to the SI Guidance Manual.

5. Figure 8

Comment

It appears the proposed sample locations are concentrated in the eastern portion of the site, although the objective of the SSI is applicable to the entire site.

It may be appropriate to better define the site boundaries in the figures, i.e., use double lines.

Response

Figure 8 has been revised to more clearly indicate the site being investigated.

6. Table 4-2, page 4-7

Comment

a) Page 4-6. The rationale, i.e., “identify contamination in aquifer,” is vague. More details should be provided. What are the depths of the off-site monitoring wells, as well as the proposed depth of the on-site geoprobe boring?

Response

Information regarding the depth of the off-site wells has been requested, along with a site access request for Apex Oil. A response has not been received. Geoprobe borings are described under Section 4.2 soil sampling.

Comment

b) Page 4-7. The “source area” is not clearly defined. How are sampling results to be attributed to the site, as opposed to the neighboring facilities, i.e., the former Laclede facility or Apex Oil Company?

Response

The text has been revised to indicate the “source area” being the former power plant building location, as shown on Figure 8. This site is part of the former Laclede facility.

7. QA/QC, Section 4.5

Comment

a) Page 4-9. The authors specify DQO Level III data will be required for this investigation. The authors correctly provide a definition for DQO Level III. The authors need to identify what it means by “DQO Level III” data, i.e., what documentation will not be required.

Response

Level III requires the use of standard EPA methods with less

documentation. Method QA/QC, including calibration analyses, instrument tuning, optimization analyses, surrogate standards, etc. must be performed to meet method criteria; however, results need not be reported to the contractor. Accuracy, precision, method detection limit, analytic results are to be reported.

Comment

b) Page 4-11, the authors state precision requirements for this investigation will be 20% for groundwater and 35% for soil samples. It is not clear what precision is being specified, i.e. analytical or overall.

Given Table 4-4 does indicate that field duplicate samples will be collected and that the lab will validate the analytical precision via R7ENSV SOP; therefore, it is being assumed these requirements apply to field duplicate samples.

Response

Precision is for the field duplicate samples and will reflect analytical, handling and collection variability. The text on page 4-11 has been changed.

Comment

c) The authors state that the validation per this SOP will address the precision, accuracy and completeness of the data reported. Completeness is not assessed by the Region 7 Lab, rather the project manager.

Response

The text on page 4-9 has been revised to state completeness will be determined by the EPA project manager.

Comment

d) The authors propose a 90% completeness objective for this investigation and further elaborate that one groundwater samples and three soil samples are required to complete this investigation. Given this statement, it is not clear why the authors requested analysis on 8 soil and 5 water samples on the ASR form.

On page 4-12, the authors state that failure to meet the 90% completeness objective will result in qualification of the data, nonuse of the data, or resampling. What is intended here?

Response

The text on page 4-11 has been revised to indicate 90% of the groundwater and soil samples are required to complete this investigation. The text has been revised to state that failure to meet these objectives will limit the usability of this data. The text from page 4-12 regarding completeness has been deleted.